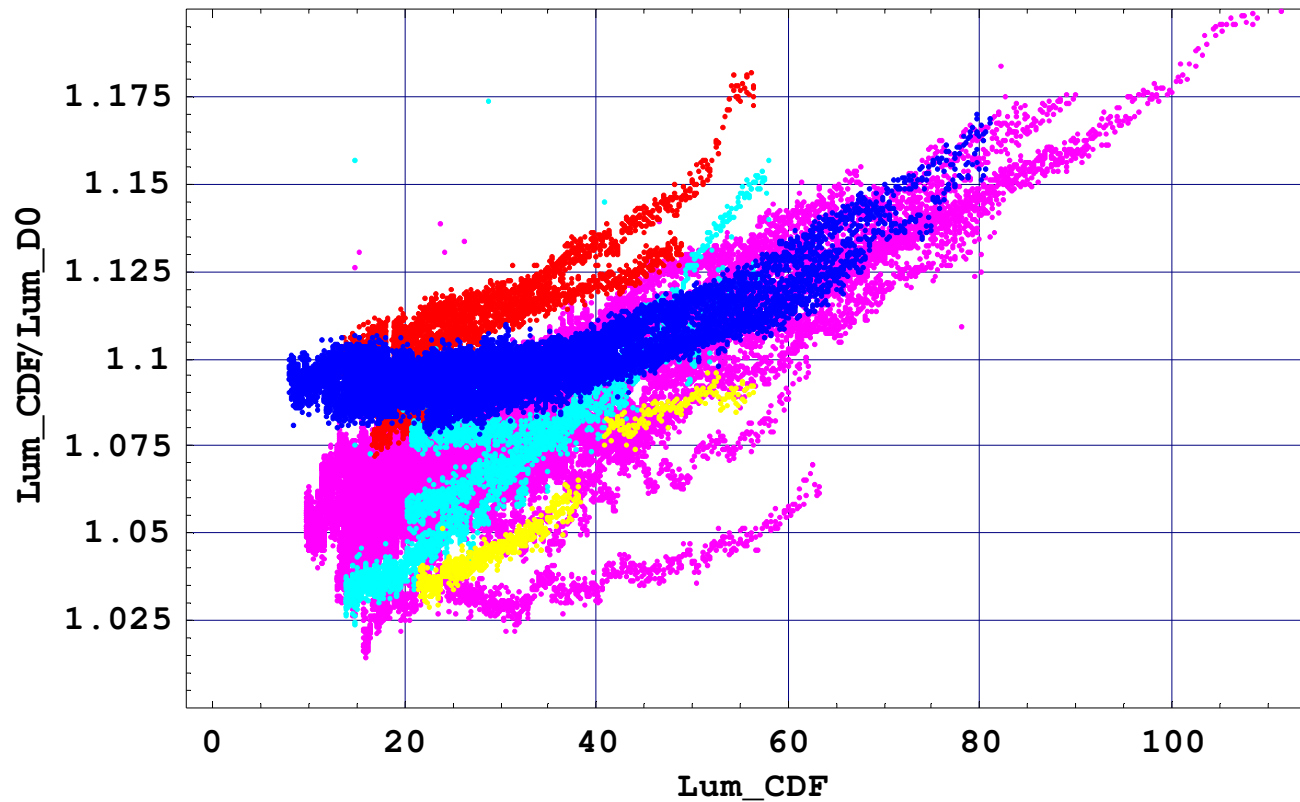


Comparison of Luminosity Ratio Evolution before/after D0 luminosity calibration

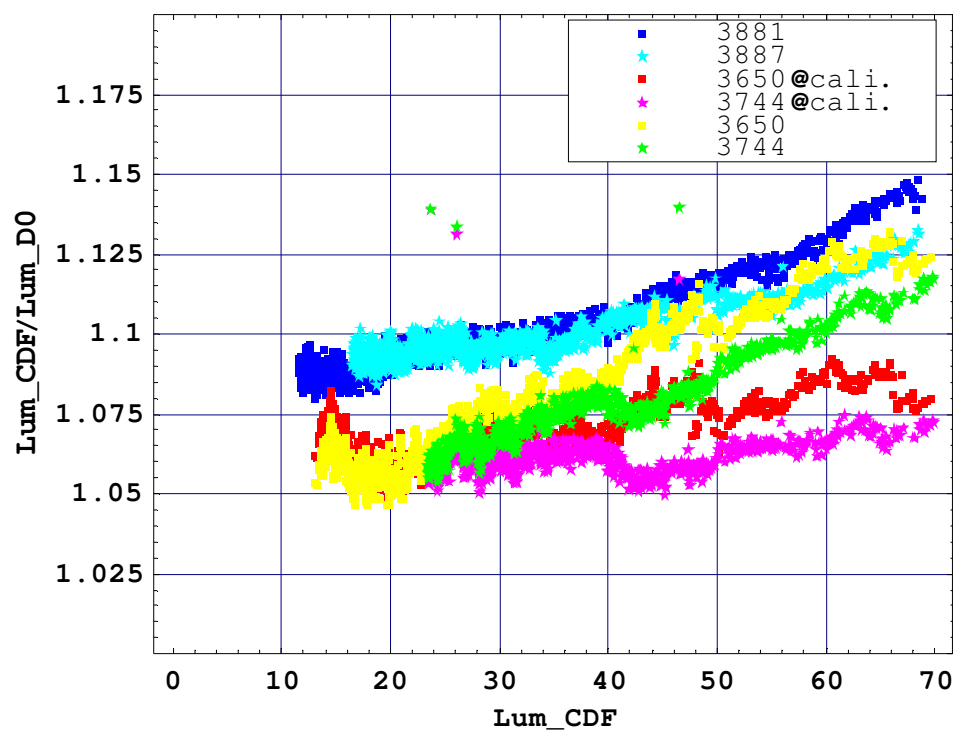
- D0 has changed luminosity calibration since store 3845 (?)
- Analysis has been made for stores: 3641 ~ 3917
- Stores: 3659, 3821, 3841, 3845, 3854, 3862 have been moved out from analysis due to very low luminosity or very short store length
- Color definition:
 - Pink: “old” before shut down (store 3641 ~ 3745, total 24 stores)
 - Red: “old” after shut down (store 3824, 3829, 3834)
 - Cyan: store 3850, 3853, 3869 (for new calibration)
 - Yellow: store 3906 (?)
 - Blue: “new” other than “Cyan” and “Yellow” (store 3872 ~ 3917, total 11 stores)

Luminosity Ratio vs. CDF Luminosity:



- Pink: “old” before shut down (store 3641 ~ 3745, total 24 stores)
- Red: “old” after shut down (store 3824, 3829, 3834)
- Cyan: store 3850, 3853, 3869 (for new calibration?)
- Yellow: store 3906 (?)
- Blue: “new” other than “Cyan” and “Yellow” (store 3872 ~ 3917, total 11 stores)

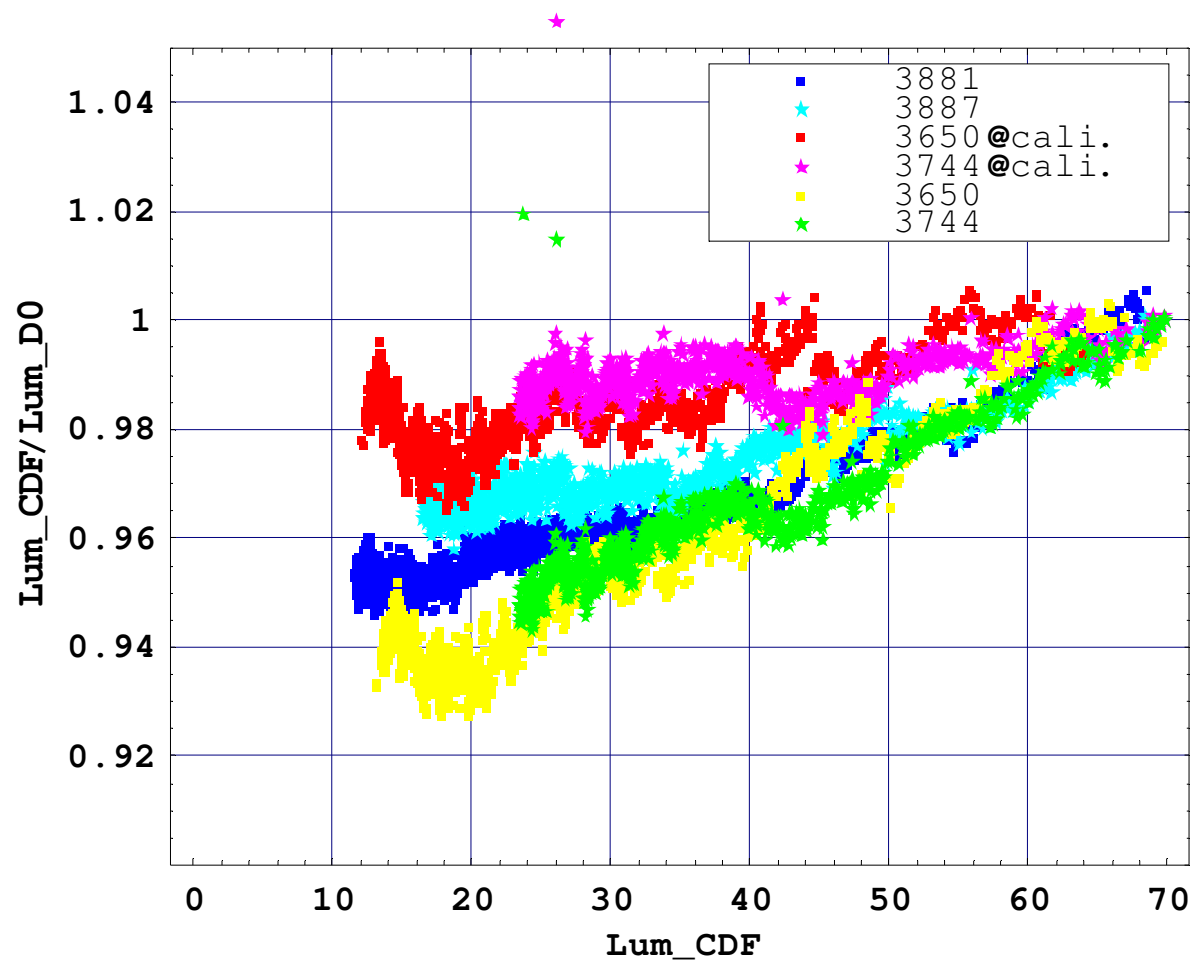
Luminosity Ratio vs. CDF Luminosity for initial luminosity@CDF = 70 :



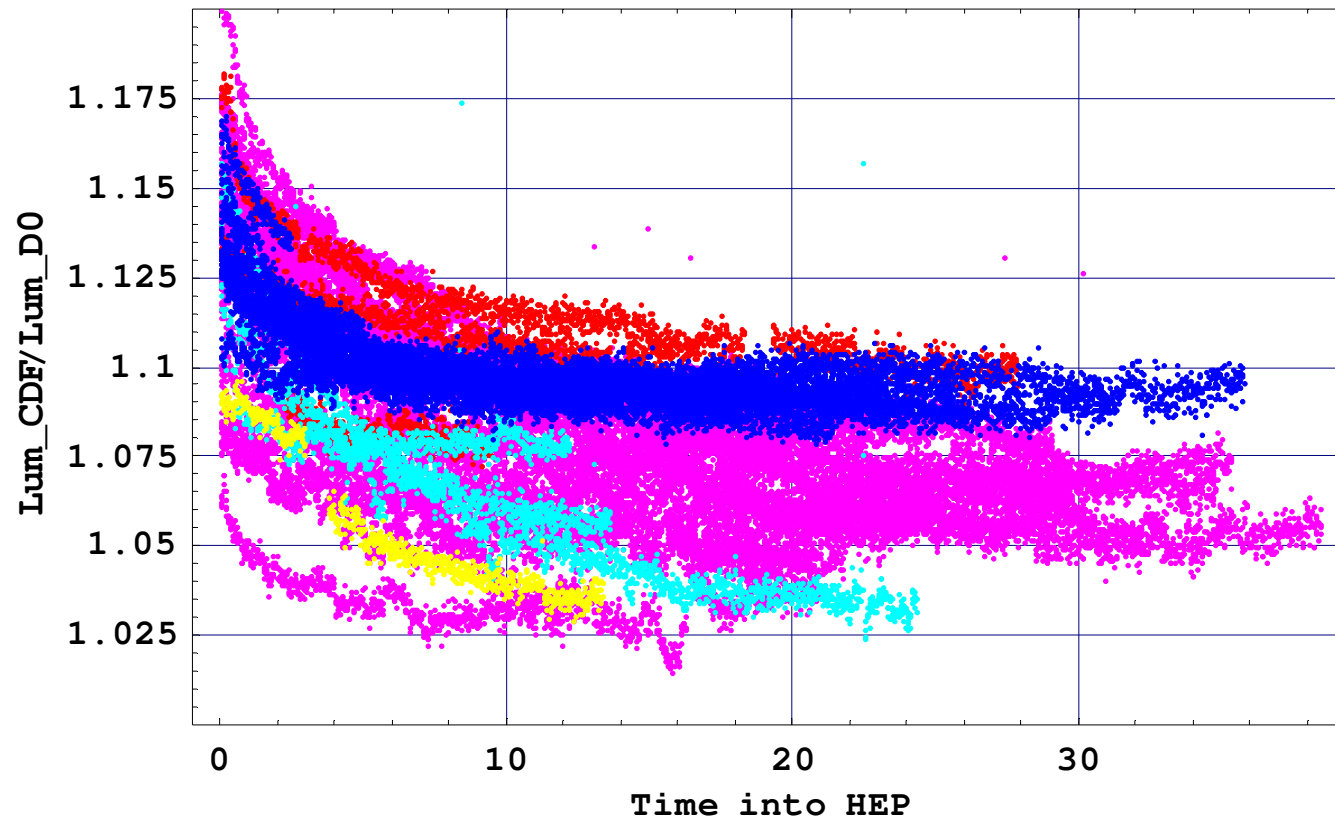
$$L_{new} = \frac{1}{1.0212} \left(1 + 1.023 \times 10^{-3} L_{old} \right) L_{old}$$

Luminosity variation during store bigger than before!

Luminosity Ratio vs. CDF Luminosity for initial luminosity@CDF = 70 :

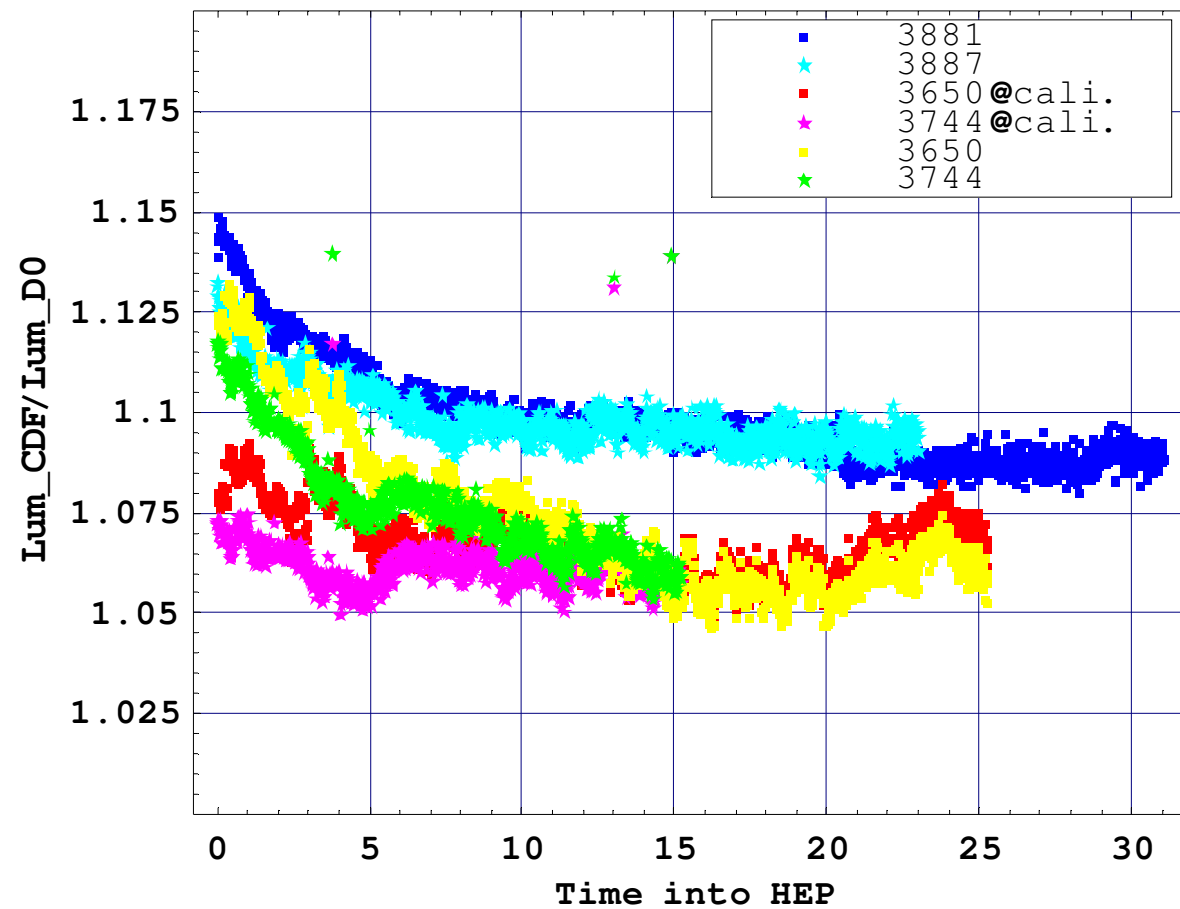


Luminosity Ratio vs. Time into HEP:



- Pink: “old” before shut down (store 3641 ~ 3745, total 24 stores)
- Red: “old” after shut down (store 3824, 3829, 3834)
- Cyan: store 3850, 3853, 3869 (for new calibration?)
- Yellow: store 3906 (?)
- Blue: “new” other than “Cyan” and “Yellow” (store 3872 ~ 3917, total 11 stores)

Luminosity Ratio vs. Time into HEP for initial luminosity@CDF = 70:



Luminosity Ratio vs. CDF Luminosity for initial luminosity@CDF = 70 :

